The FASTEC HS5

Proven 12-bit CMOS sensor on a new high-performance platform utilizing the Fastec Camera Controller for unrivaled access to captured images!

- 2560 x 2048 @ 253fps streaming to 1TB SSD
- 512 x 306 @ 5000fps
- Up to 29,000fps at smaller resolutions

High-Speed Video Capture!
High-Speed Image Storage!
High-Speed Image Transport!
High-Speed Application Workflow!

- Advanced architecture for enhanced workflow
- Camera with optical interface affords high-bandwidth transport using industry-standard fiber cabling
- Extensible Linux Camera Controller, compatible with standard displays and input devices, including Bluetooth and WiFi
- Run your own applications on the camera controller
- Attach high-speed high-capacity mass storage via USB3.1 Gen2 or Thunderbolt 3 interfaces
# HS5 Specifications

<table>
<thead>
<tr>
<th>System Design</th>
<th>Camera plus tethered Controller</th>
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<tbody>
<tr>
<td>Sensor</td>
<td>12-bit 2560 x 2048 CMOS, 5µm pixels, supports binning and subsampling</td>
</tr>
<tr>
<td>Interconnect</td>
<td>12 Channel Type B Fiber Optic patch cable with MPO connectors</td>
</tr>
<tr>
<td>Calibration Shutter</td>
<td>Built-in mechanical shutter for black-level calibration</td>
</tr>
<tr>
<td>Image Memory</td>
<td>8GB, 16GB, or 32GB (in camera)</td>
</tr>
<tr>
<td>Mass Storage</td>
<td>Up to 2TB NVMe SSD (in camera)*</td>
</tr>
<tr>
<td>External Storage</td>
<td>Thunderbolt3 or USB-3.1 SSD, MicroSDXC slot with UHS-1 support</td>
</tr>
<tr>
<td>File Formats</td>
<td>Stacks – BMP, DNG (color), JPEG, TIFF (processed or raw) Video – AVI, CAP (raw), MP4</td>
</tr>
<tr>
<td>Lens Mount</td>
<td>Micro Four Thirds (MFT) Standard; C, F, EF, PL, and more via adapters</td>
</tr>
<tr>
<td>Lens Control</td>
<td>Software control: Focus, Aperture, Zoom</td>
</tr>
<tr>
<td>Controller Display</td>
<td>HDMI 2.0a and/or DisplayPort 1.2 via TB3/USB-C port. Supports multiple displays</td>
</tr>
<tr>
<td>Control Software</td>
<td>FasMotion native on Controller, with network support: FasMotion (Windows/MacOS/Linux application) on networked PC</td>
</tr>
<tr>
<td>Marker &amp; Metadata</td>
<td>Image window playback time line, FasMotion o-scope mode, XML file</td>
</tr>
<tr>
<td>External I/O Ports</td>
<td>3 configurable ports: Trigger In/Out, Sync In/Out, Arm In/Out, or General Purpose In @ 3.3v LVTTL, or 5v TTL, or switch closure</td>
</tr>
<tr>
<td>Construction</td>
<td>Anodized machined aluminum housing</td>
</tr>
<tr>
<td>Power</td>
<td>Camera: 12v 30w; Controller 19v 90w</td>
</tr>
<tr>
<td>Environment</td>
<td>+5°C to +40°C</td>
</tr>
<tr>
<td>Size and Weight</td>
<td>114mm (4.5”) W x 114mm (4.5”) H x 76mm (3”) D. 1 Kg (2.2 lbs.)</td>
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</table>

## Record Rates and Times

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Max Frame Rate (8, 10, or 12 bits)</th>
<th>Record Time 8 bits to 32GB memory</th>
<th>Record Time 8 bits streaming to 1TB SSD*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2560 x 2048 (QSXGA)</td>
<td>253 fps</td>
<td>25 sec</td>
<td>12.5 min</td>
</tr>
<tr>
<td>2560 x 1440 (QHD)</td>
<td>359 fps</td>
<td>25 sec</td>
<td>12.5 min</td>
</tr>
<tr>
<td>1920 x 1080 (HD: 1080p)</td>
<td>634 fps</td>
<td>25 sec</td>
<td>12.6 min</td>
</tr>
<tr>
<td>1280 x 1024 (SXGA)</td>
<td>991 fps</td>
<td>25 sec</td>
<td>12.8 min</td>
</tr>
<tr>
<td>1280 x 720 (HD: 720p)</td>
<td>1403 fps</td>
<td>25 sec</td>
<td>12.8 min</td>
</tr>
<tr>
<td>1024 x 768 (XGA)</td>
<td>1316 fps</td>
<td>32 sec</td>
<td>16 min</td>
</tr>
<tr>
<td>800 x 600 (SVGA)</td>
<td>1677 fps</td>
<td>41 sec</td>
<td>20.5 min</td>
</tr>
<tr>
<td>768 x 576</td>
<td>2764 fps</td>
<td>54 sec</td>
<td>13.6 min</td>
</tr>
<tr>
<td>640x480 (VGA)</td>
<td>3289 fps</td>
<td>66 sec</td>
<td>16.4 min</td>
</tr>
<tr>
<td>512 x 384</td>
<td>4061 fps</td>
<td>84 sec</td>
<td>25.7 min</td>
</tr>
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</table>

*Streaming mode with ‘D’ option only.

All Specifications subject to change.

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